

**Abstract**

An antenna intended to be used in a small and foldable radio device and a radio device which has an antenna according to the invention. The radiating element (120) in the antenna is a conductor having an outline shaped substantially like a rectangle and defining a plane which is perpendicular to the ground plane (GND) situated on the circuit board (111) of the radio device. The radiating element is so narrow that it fits inside the foldable device in the perpendicular position. The element is connected to the radio device only by its feed point (F). Resonating frequencies of the element can be arranged in desired locations besides by shaping the element, also by means of discrete components (L, C). The matching of the antenna is easily arranged by providing an appropriate distance between the radiating element and ground plane. In an operating situation, an antenna gain is achieved which is considerably higher than that of a PIFA of equal height.

Fig. 1